

Governor's STEM Advisory Council

Application for STEM Scale-Up Eligibility

Draft: 3-9-2012

STEM Council Executive Committee: SCALE-UP Proposed Timeline

February 23 Exec. Comm. review of Application

March 12 Exec. Comm. approve release of Application

March 13 Disseminate Call for Applications

May 30 Application Due Date

June 6 SCALE-UP selection committee convenes

June 14 SCALE-UP recommendations to Co-Chairs and Exec. Comm.

June 18 SCALE-Ups announced

2012 APPLICATION FOR STEM SCALE-UP ELIGIBILITY

Purpose of This Application

The purpose of this Application for STEM Scale-Up Eligibility (SSE) is to solicit applications from high-quality scalable projects with demonstrated success in increasing student interest and achievement in STEM. Applications will undergo a review process to identify and approve a focused pool of projects for the designation of "Scalable STEM Projects."

Executive Order Number 74 signed by Iowa Governor Terry E. Branstad on July 26, 2011, declared that science, technology, engineering and mathematics (STEM) education should be strengthened as part of providing a world-class education, encouraging innovation and enhancing economic development in Iowa.

One component of STEM education is STEM literacy which refers to an individual's ability to apply his or her understanding of how the world works within and across the four areas of science, technology, engineering and mathematics. It does not simply mean achieving literacy in these areas individually. Rather, STEM literacy refers to the ability to investigate, design and question these facets of the world in an interdisciplinary manner.

"Math, science, engineering and technology innovation are the soul of creativity and the engine of economic progress," said Jeff Weld, Executive Director, Governor's STEM Advisory Council. "The future well-being of our youth and the relevance of our state hang in the balance as this group of leading thinkers (*Governor's STEM Advisory Council*) take on something of a Manhattan Project for lowa: building a STEM-literate citizenry and first tier modern workforce."

lowa's commitment to improving STEM education includes an investment of the 2012 legislature to financially support scaling up exemplary STEM projects throughout lowa that have demonstrated a positive impact on student interest and achievement targeting all learner sectors from preschool through post-secondary. The anticipated Scale-Up Project budget allocated by the Iowa Legislature for the period July 1, 2012, through June 30, 2013, is in the approximate range of \$1.0 to \$2.0M plus expected non-state match.

First year funding will be distributed to six newly established Regional STEM Network Hubs with the intent that each Regional STEM Network Hub will select from a list of "Scalable STEM Projects" approved by the Governor's STEM Advisory Council. These projects will be funded to achieve broad implementation of exemplary STEM education throughout lowa with consideration given to the particular needs of each region.

What Constitutes a Scalable STEM Project?

Scale-Up Projects must already be in use in Iowa and provide evidence of successfully meeting project goals and criteria for scalability. The most competitive applications will be those that are clearly evidence-based and well-planned. Incomplete proposals will not be considered for selection.

Project Goals: The year one priority of the Governor's STEM Initiative is to increase student interest and achievement in STEM. Applications must include measurable goals and objectives related to student interest and achievement in STEM.

Project Scalability: Successful Scale-Up Projects must demonstrate the capacity to deliver the program beyond the original project site and sustain continuity of project outcomes over time in these new locations.

A successful Scale-UP Project must clearly demonstrate:

- 1. Prior effectiveness of the program and the promise for future or continued effectiveness and success in increasing student interest and achievement in STEM, directly and indirectly;
- 2. Existing evidence that the program has already increased student interest and achievement in STEM (e.g., attitudes, interest, grades, test scores, enrollment in STEM courses or enrichment activities);
- 3. Demonstration of successful scaling since the program's inception (e.g., classroom to classroom or site to site) including the length of time the project has been implemented and number of students and/or educators impacted;
- 4. A close working relationship with Iowa's PK-20 structure (whether the project is an educational/not-for-profit OR private/for-profit organization);
- 5. Content development and associated learning outcomes that align with the Iowa Core;
- 6. Capacity for sustainability after the specified project period has ended.

IMPORTANT INFORMATION:

- A. The plans of the Governor's STEM Advisory Council for program Scale-Up may be subject to the resolution of a State funding request currently before the Governor and Iowa Legislature. This Call for Applications is being released at this time so as to allow all entities adequate time to consider participation and to allow for the implementation of scalable programs beginning operation on or before September 1, 2012.
- B. Applications will be evaluated and selected by an impartial Review and Selection Committee of persons who will not be submitting or participating in any Scale-Up applications.
- **C.** The Review and Selection Committee, subject to oversight by the co-chairs of the Governor's STEM Advisory Council, will retain total discretion in the selection of each scalable program and may consider, but not be limited to, commitment, creativity, identification of a variety of models across the State, expertise and any other consideration that, in their total discretion, they think is or may be important. They may also choose to reject all proposals.

Eligible Applicants: Applications are to be submitted through the organization or institution with which the applicant is affiliated and must be submitted electronically at www.iowamathscience.org/SCALE. The Scale-Up designation can only be applied to educational programs or entities and cannot be awarded to individuals, local, county or state government entities. Applicant categories include:

Academic Institutions: Universities, colleges, area education agencies, schools and school districts may submit proposals.

Nonprofit Organizations: Museums, science centers, youth organizations, professional groups and other similar organizations directly associated with STEM educational activities may submit applications. Private non-profit organizations must have permanent, tax-exempt 501(c) 3 ruling determination from the federal government and valid registration in Iowa as a nonprofit organization able to legally conduct business in and with the State of Iowa.

Private Industry: Businesses directly involved with STEM educational activities may submit applications (e.g. learner enrichment programs or teacher professional development).

Submission of Applications

Electronic Submission Deadline: The deadline for electronic submission is no later than May 30, 2012. The e-mail must have a time stamp of before 11:59 pm on May 30 to be considered valid. Late proposals will not be considered.

Submission Process: There are three parts to the submission process.

- **A. Online Scale-Up Application Form:** Complete and submit the application form found at www.iowamathscience.org/SCALE.
- **B. Submission of Confirmation Email/Proposal Authorization form:** After you submit an online Scale-Up application, you will receive a confirmation email. Please print your Submission Confirmation email and have this document signed by the project PI and an authorized representative of your organization (Executive Director, Board Chair, Grants Office, etc.).

Mail an original ink signed copy of this document no later than June 6, 2012, to:

Jeffrey Weld, Ph.D., Executive Director Governor's STEM Advisory Council 214 E. Bartlett Hall, University of Northern Iowa Cedar Falls, Iowa 50614-0298 **Scope of Proposal:** Scale-Up Proposals should present the following.

- The objectives and significance of the STEM project to be scaled-up.
- The evidence base for the STEM project (including previous evaluation methodology, types of data collected and results from implementations in Iowa and elsewhere, as available).
- The need for the project, including a description of and justification for the method or approach to be employed (including goals, specific and measurable objectives, and activities).
- Specific plan about how the project can be scaled-up for Iowa students (e.g., from a school to a district or a site to regional).
- The qualifications of the project director and affiliated organizations or institutions (including previous experience relevant to the application).
- A project budget that reflects the cost of running the project at the smallest unit (e.g., classroom, school, district, community group, troop) for one year.

Since the application will compete with others for the designation of a "STEM Scalable Project," it should present the educational merit of the proposed project clearly and convincingly. The project must contribute to the advancement of STEM education in Iowa. It is important that the language of the Project Summary be understandable to the general public.

Project Schedule: The announcement of the applications selected for designation as "Scalable STEM Projects" will be made on or about June 18, 2012. STEM Regional Network Hubs will be charged with delivering resources (funding and human resource-matching) for the scale-up of programs within the region shortly thereafter. Funding cycle will span the fiscal year from July 1 to June 30. Funding to sustain Scale-Up projects throughout lowa will be subject to annual review through an evaluative rubric that will include performance indicators and cost-sharing accomplished.

Guidelines for the Preparation of Proposals

Full applications must include items #1-7 as listed below.

1. Cover Page

2. Narrative (use only the allotted space): Complete each section: Public Abstract, Implementation Plan: Sections a–k, Project Resources and Budget Justification.

Public Abstract: A public abstract is required for all applications. Use only the allotted space. Include your goals, objectives and methodology. Information in the abstract should include:

- Who is the lead applicant and who are the partners?
- Describe your project including how it has demonstrated success.
- How is your project well-suited for scale-up across lowa?
- Who is the intended audience for the activities?

3. Implementation Plan:

- A. Project Description: Describe the need that the project was developed to address and any needs assessment performed. Describe the project at its initial site, including the leadership model and how the program was delivered to its intended audience. Explain how the project achieved its goals and over what period of time you have sustained the project. Provide a description of the scope of the project including number of schools, students, teachers, parents, community members, etc. that were impacted directly or indirectly.
- **B. Project Goals and Objectives:** State the overall project goal(s) and objectives. Objectives should be specific, measurable, attainable, realistic and time-bound. Clearly describe the alignment of project goals, objectives, activities, and outcomes.
- C. Evidence Base: Provide a description of the evidence or research base for the proposed STEM project, including descriptions and/or results from implementations in Iowa. Describe previous evaluations of the project. This should include methods used, type(s) of data collected and results. As described above, the year one priority is student interest and achievement in STEM. As such, provide evidence for how the proposed project addresses this priority (including sources of data and questionnaires or instruments used).
- **D. Project Methodology**: Specify the pedagogical approach taken to achieve the project objectives. Describe, in sufficient detail to facilitate evaluation, all tasks performed during the course of the project and how they link to objectives.
- E. Content and Instruction: Describe STEM content, how it is aligned with local, Iowa Core (science) and Common Core (math), or national standards, and in what ways it is challenging and relevant. Address how science, technology, engineering and mathematics are authentically integrated in a meaningful context within your project. Please include additional connections or integrations with other disciplines if incorporated in your project. In addition, describe how the project will inspire interest and engagement in STEM.
- F. **21**st **Century Skills:** Describe how the project incorporates 21st Century Skills. For additional information go to http://science.nsta.org/ps/Final21stCSkillsMapScience.pdf
- **G. Scalability:** Describe how the program could be scaled-up for lowa students (e.g., from a school to a district). Demonstrate that the program is adaptable to numerous, diverse new sites and works with local sites to adapt to local conditions. Describe the process that would be necessary to scale the project from the smallest unit to the next level.
 - Successful scale-up projects should demonstrate the capacity to expand the delivery model beyond the original site and sustain continuity of project outcomes over time. Please provide examples of successful project replication that you have experienced, such as:

- Length of time your project has been in place;
- Number of sites expanded to;
- Number of project cycles conducted at each site (start date and end date);
- Number of educators impacted, if applicable;
- Number of students impacted;
- Describe your experience with the scaling process: hurdles, project growth, etc.

Please include a description of the funding model of your project. If your project was funded from external sources, was the funding process competitive? Have the original funding partners provided subsequent rounds of funding and do you anticipate continued support? Also, describe the funding model that would be necessary to support and sustain your project through scale-up.

H. Partners: Collaboration is a preferential component of Scale-Up Project applications. Describe how partnerships with other organizations such as those listed below strengthen the project when it is scaled. Collaborations within and across organizations should strengthen project outcomes (include letters of support that indicate how partners will be engaged in helping to scale-up the project across lowa). Inclusion of formal and informal partnerships is encouraged. Describe the nature of the partnership, including how the partnership will impact the anticipated outcomes.

Examples of partner organizations:

- Professional organizations related to STEM (Iowa Academy of Science, ISTS, ICTM)
- Area Education Agencies (AEAs)
- Higher Education (community colleges or universities)
- Schools or districts
- Community groups or organizations (non-profits, youth agencies, etc.)
- Business and industry
- Zoos, museums, science centers and other informal learning groups
- I. Diverse Learners: Discuss how access and opportunities will be provided to all STEM learners. Describe whether and how your program plans to address diversity and disparities in STEM education. Examples of diversity: content, learners, setting (urban/rural), socioeconomic, gender, under-represented, special needs, multi-age grouping, etc.
- **J. Opportunities and Challenges**. Describe anticipated opportunities, potential challenges in implementation, and the plans for addressing them.
- **K.** Sustainability. Describe how your program is sustainable.
- **L. Timeline.** Provide a timeline showing the recommended implementation schedule during the one-year project period (beginning July 1, 2012).

M. Project Resources: Personnel, Budget

All applicants must use the SSA Budget form available at www.iowamathscience.org/SCALE to detail project expenditures. Read the instructions thoroughly before completing your budget form. Remember that the budget is for one year only. Successful Scale-Up Projects adopted by the Regional STEM Network Hubs will be subject to annual review to determine sustained funding.

Please create your project budget based on the cost of running the project at the smallest unit (i.e., classroom, school, district, community group, troop, etc.) for one year. Budgets for scale-able projects should fit the scope of the project which might be for students (e.g., robotics), for teachers (e.g., professional development), for informal organizations (e.g., family STEM night) or for communities (citizen-science). Please detail within your budget the cost of the project per person impacted including an explanation as to how the cost is calculated.

Cost sharing is not required in year one of the STEM Scale-Up program. However project proposals that demonstrate community ownership in the form of funding (cash and in-kind) and strong collaborative partners will be favored in the review process.

Application budgets may include expenses considered necessary to scale-up the project including:

- Teacher stipends
- Equipment & supplies
- Travel expense
- Personnel, contract or in-house staff time necessary for proper and efficient execution of the project
- Project consultants and their travel
- Costs related to planning and maintenance of project partnerships
- Program development/implementation
- Exhibition design/fabrication
- Integration of technology
- Programming and education
- Professional development
- Web site content and design
- Costs associated with evaluation
- Mentoring costs
- Recognition events

Unallowable expenses for the Scale-Up Project Budgets include:

- Construction or renovation on existing buildings
- General fundraising
- General operational support
- General public relations or advertising that is unrelated to the project
- Contributions to endowments
- Social activities, ceremonies, receptions or entertainment

Describe additional resources required to scale-up the project. Include information such as:

- Identification of key project staff, their duties, relevant qualifications/experience and the time that key staff will devote to the project.
- Effective professional development on subject matter, project-based teaching and/or skills in building strong relationships.
- Identification of consultants and service providers involved in project activities and the process for selecting them, and how they will work with project staff.
- The facilities, equipment and supplies necessary to support the project.

N. Budget Narrative:

For each budget category, provide a written justification for the requested amount.

- O. **Resumes**: Include a maximum of two pages for each key individual directly involved in the implementation of the project, including collaborative partners.
- P. **Supporting Documents:** Supporting materials (e.g., models, support letters, etc.) are only permitted as web-links to on-line supplementary information.

REVIEW OF APPLICATION AND SELECTION:

Applications will be reviewed by a SSE Committee (comprised of regional representatives and others with no interest, direct or indirect, in the outcome) based on the scoring rubric above, and make recommendations to the Governor's STEM Advisory Council Executive Committee. Incomplete and late applications will not be accepted.

NOTIFICATION DETAILS OF SCALE-UP PROJECT DESIGNATION:

Those projects awarded Scale-Up designation will be identified on or about June 18, 2012, and notified via email. Simultaneously, projects selected for Scale-Up designation will be presented to lowa's six Regional STEM Network Hub Advocates. Together with their Regional Advisory Councils, they will determine the projects for scale-up in their regions based on their needs, using funds for that purpose. Regional Network decisions on Scale-Up project selection will be determined by fall of 2012. The application proposer will work with the Regional Advocates to facilitate scaling up the program within regions. Proposers will be invited to participate in the annual review process evaluating their scale-up project in regions of the state for renewal consideration. It is expected that new applications will be invited each subsequent year and that some funded programs will be continued while others may be discontinued based on progress toward goals.



Governor's STEM Advisory Council

Application for STEM Scale-Up Eligibility Scoring Rubric (DRAFT 3-9-2012)

The purpose of this rubric is to provide a framework for scoring applications for the STEM Scale-Up Eligibility. This rubric aims to help reviewers evaluate each application's ability to boost student interest and achievement in science, technology, engineering, and mathematics (STEM). Use this scoring rubric to guide your judgment. It can help you to ask the right questions of applicants and to give structure to your analysis of STEM programs.

There are 13 sections in the scoring rubric. Within each section, up to 8 points are possible (*points must be assigned as whole numbers*). All applications are to be reviewed and categorized as undeveloped, developing, or accomplished in each of these sections. Please note that sections A, E, and G are weighted more heavily on the rubic. The maximum score possible is 100 points with an extra 5 Bonus Points for unanticipated dimensions to the applications.

A. Project Description: Does the project address a compelling and well-defined need and does it have the capacity to meet its goals?

Accomplished (6-8)	Developing (3-5)	Undeveloped (0-2)
Statement of need is clear,	Statement of need is clear and	Description of need is vague or
compelling, and supported by	compelling but cites only general	unconvincing and cites little or
recent, valid and targeted data.	data.	no data.
Project makes clear that it adds	Project identifies other past or	Project makes no attempt to
unique value in addressing the	present programs that address	identify or evaluate other past or
need.	the same needs but does not	present programs that address
	fully demonstrate how it adds to	the same need.
	those programs.	
Target audiences are well defined	Project defines target audiences	Project does not make clear what
and closely tied to statement of	but does not clearly tie them to	audiences it is targeting.
need.	statement of need.	
The organization has been active	The organization has some track	Though the organization is not
in STEM learning in the past and	record in reaching educational	new to STEM learning, it cannot
has a track record of	goals but not in STEM, not to the	demonstrate any track record of
accomplishing STEM educational	extent proposed or not with the	accomplishing the proposed
goals with the proposed	proposed target population.	goals.
population.		
The organization clearly	The organization demonstrates	The organization makes no
articulates how its staff,	that it has enough resources and	attempt to demonstrate that it
infrastructure, internal expertise	staff to do the work, but it is not	has the staff, infrastructure or

and other resources would	clear that its staff have the time	expertise to carry out the
support the proposed project.	or expertise to do the work.	proposed project.

B. Project Goals and Objectives: Does the project clearly define goals?

Accomplished (4-5)	Developing (2-3)	Undeveloped (0-1)
Goals are ambitious but feasible and directly linked to the statement of need. A clear description is provided on how progress will be measured.	Project goals are ambitious and feasible but difficult to measure.	Goals are too ambitious for this program alone to fulfill—or too un-ambitious to be worthwhile.
Clear milestones with viable timelines are presented.	Scope of work is included, but the timeline is vague or nonexistent.	Program lacks clear milestones or timeline.
Project regularly uses data from external or internal evaluations to identify and act on opportunities for improvement.	Program only sporadically uses evaluation data to identify and act on opportunities for improvement.	Program has no plans for using evaluation data to improve itself.

C. Evidence Base: Does the project exhibit a strong research base?

Accomplished (4-5)	Developing (2-3)	Undeveloped (0-1)
Current third-party evaluation data demonstrates that the project is reaching its goals. If the project is new, it is based on high-quality research.	Project is based on research that does not directly apply to the project's circumstances. Project designers conduct their own evaluation.	There is no research cited or a plan to evaluate the project's progress to meet goals.

D. Project Methodology: Does the project incorporate Science and Engineering Practices (Inquiry and Hands-On Learning)?

Accomplished (4-5)	Developing (2-3)	Undeveloped (0-1)
Project promotes inquiry by encouraging participants to pose relevant questions, seek possible explanations, test those explanations and draw conclusions.	Research activities are hands-on but do not consistently encourage inquiry. Some hands-on activities are routine and focus on the "right answers".	The project does little or nothing to encourage hands-on learning.
Project creates an environment where educators and participants work together as active learners.	At times, the project allows students and educators to work together as active learners, but, as a rule, the instructor drives the learning.	Staff or volunteers lead instruction with little opportunity for students to become active participants in their learning.
Project clearly demonstrates how it creates excitement about STEM.	Project aims to inspire but does little to dispel negative preconceptions about STEM.	Project makes little or no attempt to show that STEM concepts are interesting or useful.
Project clearly shows how it connects STEM to participants' own interests and experiences.	Project relates STEM to participants' experiences, but only occasionally.	Project does not connect STEM concepts to participants' experiences.

E. Content and Instruction: Is the STEM content challenging and relevant?

Accomplished (6-8)	Developing (3-5)	Undeveloped (0-2)
Content clearly reflects high expectations for all participants.	Project acknowledges the need for high expectations for participants but does not clearly spell out what those expectations are.	Project emphasizes only lower level skills.
Project is clearly and explicitly aligned with local, lowa Core and Common Core or national standards and provides access to the curricular resources the participants need. Where appropriate, content is aligned with school curriculum.	Project states that it is aligned with standards and school activities but does not clearly demonstrate the strength of that alignment. Some required resources are not readily available for participants.	Project pays no attention to local, state or national standards or what is currently being taught in school. Participants have little access to curricular resources.
Project focuses on real-world applications of STEM where possible.	Project makes an effort to relate STEM learning to real-world applications, but applications are not always clear, they are forced, or undermine the rigor of the STEM content.	Project makes no attempt to link content to real-world STEM applications.
Project prompts participants to apply STEM content in new or	Project offers opportunities to apply content, but they are	Project focuses primarily on recall of knowledge and/or
unexpected situations.	artificial or inconsistent.	routine skills.

F. 21st Century Learning Skills: Does the project focus on "21st Century Skills"?

Accomplished (4-5)	Developing (2-3)	Undeveloped (0-1)
Project explicitly demonstrates how it builds skills like critical thinking, problem-solving,	Project explicitly aims to promote "21 st Century Skills", but it does not clearly specify	Project makes no clear attempt to engage participants in "21 st Century Skills".
creativity and teamwork.	how.	
Project prompts participants to be innovative and create new	Innovation is discussed, but not used to create new ideas or	Project does not address innovation.
ideas or products.	products.	

G. Scalability: Does the program promote replication and scalability?

Accomplished (6-8)	Developing (3-5)	Undeveloped (0-2)
Project documents how it can be	A process for replicating the	There is no effort to show how
scaled or replicated and offers	program is offered, but it is not	the project might be scalable to
tools to support such.	well documented.	other sites.
Project regularly communicates	Project provides information to	There is no effort to show how
results to promote replication to	other sites but only on an ad hoc	the project might be scalable to
new sites.	basis, when requested.	other sites.
Project demonstrates that it is	Project is documented so it can	Project is tied exclusively to a
adaptable to many new sites and	be replicated, but it does not	specific site because of its unique
works with local sites to adapt to	account for local conditions that	resources, personnel or other

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local conditions.	may affect implementation.	requirements.

H. Partnerships: Does the project create high-impact partnerships where beneficial?

Accomplished (4-5)	Developing (2-3)	Undeveloped (0-1)
Complementing the expertise of	Other organizations or	Though the organization lacks
the team, the project partners	businesses are brought in on an	the competencies to reach its
systematically round out capacity	ad-hoc basis to perform discrete	goals, it does not partner with
of the project.	tasks, but partners are not	organizations that can supply
	included in planning stages, and	those competencies.
	their relevant competencies	
	aren't fully integrated into the	
	project design.	
Project identifies and partners	Project bases its work on	Project makes no effort to build
with organizations that have	relevant prior work by other	on the work of others or identify
already done work that can help	local organizations, but it does	parents that could extend its
it reach its goals or magnify its	not explore partnerships with	impact.
impact.	those organizations that could	
	extend its impact.	

I. Diverse Learners: Does the project address the needs of diverse STEM learners?

Accomplished (4-5)	Developing (2-3)	Undeveloped (0-1)
Project explicitly addresses needs	Project can be used successfully	Project's structure and content
of diverse under-represented	with diverse under-represented	does not address the needs of
students in STEM fields.	students, but makes no explicit	students who are already well
	attempt to address their needs.	represented in the STEM
		pipeline.
Project demonstrates that it will	Project plans targeted	Project has no recruitment
successfully reach diverse under-	recruitment efforts but lacks	efforts to reach diverse students
represented students through	mechanisms to document its	and no evidence that it is actually
targeted recruitment efforts.	success.	reaching those groups.

J. Opportunities and Challenges: Have outside factors or conditions that can accelerate or thwart the project's progress been identified and addressed?

Accomplished (4-5)	Developing (2-3)	Undeveloped (0-1)
Project has identified and made	Project has identified such	Project has made no efforts to
concrete plans to take advantage	opportunities, but they are not	identify outside opportunities
of opportunities such as local	secured.	that could advance its work.
matching funds, favorable state		
or local policies or existing		
reform initiatives.		
Project has identified potential	Project has identified potential	Project makes no effort to
challenges and it has detailed	challenges, but plans for	address potential barriers to
plans in place to deal with such	addressing them are not yet fully	implementation.
contingencies.	developed.	

K. Sustainability: Does the project ensure sustainability?

Accomplished (4-5)	Developing (2-3)	Undeveloped (0-1)
All stakeholder organizations	Some stakeholders are	Critical stakeholders—such as
actively support the program and	supportive, but there is no plan	school district or community
communicate that support to	to communicate the importance	leaders—are barely aware that
their members or employees.	of the program to others.	the program is planned.
Projected benefits to teaching	The cost per participant is high	The program cannot
and/or learning justify the cost	but justified, and there is a viable	demonstrate a benefit that
per participant.	plan to reduce costs.	justifies the cost per participant.
Project includes description of	Project mentions or makes note	No reference to implementation
the availability a detailed	of implementation instructions in	instructions.
Implementation Instructions.	an informal manner or available	
	upon request.	

L. Project Timeline: Does the project timeline seem reasonable for success?

Accomplished (4-5)	Developing (2-3)	Undeveloped (0-1)
Detailed project timeline seems to be reasonable for success.	Project timeline is either too aggressive or too slow to seem reasonable to reach project goals.	Project timeline is unreasonable.

M. Project Resources: Does the project ensure the budget and the capacity of program staff or volunteers to promote STEM learning?

Accomplished (4-5)	Developing (2-3)	Undeveloped (0-1)
Project budget sufficiently meets	Project budget has areas of	Project budget is unreasonable.
the needs of the project for	question regarding its ability to	
optimal success.	meet the needs of the project,	
	but overall seems adequate.	
Project team has expertise in	Project team has the STEM	Project team lacks sufficient
STEM subject matter and has a	subject matter knowledge but	depth in STEM subject matter
command of project-based	may have too little experience	and cannot demonstrate
learning.	with project-based learning or	experience with project-based
	vice versa.	learning.
Where necessary, project	Project offers staff or volunteers	Project offers staff or volunteers
provides effective professional	professional development in one	no training or direction.
development on subject matter,	or more of these critical areas,	
project-based teaching and/or	but neglects it in others.	
skills in building strong		
relationships.		

5 Bonus Points: Up to five points awarded for a dimension not anticipated. Think Innovation!